

## **Utah Anemometer Loan Application – 20-meter tower**

## **Instructions**

Utah's Anemometer Loan Program is made possible through the U.S. Department of Energy's Wind Powering America Initiative. To participate in the program, please fill out this application in its entirety. If you are applying for more than one location, please complete separate applications for each specific site. Completion of the application does not guarantee the loan of an anemometer, and the number of anemometer towers available will vary. Applications are due by March 1<sup>st</sup> for spring and summer installations and August 1<sup>st</sup> for fall installations. Anemometers are generally installed at a site for no less than one year.

The following factors are used to evaluate each proposed site:

**Wind Resource Map:** What is the quality of the wind resource as predicted on Utah's wind resource maps? Sites located within or close to regions that have a high-predicted wind resource are looked on favorably. However, these maps give a rough estimate of available wind resources and are not taken as definite. Many quality sites have been identified inside areas that were predicted to have poor wind resources by these maps. Utah's wind resource maps can be viewed at <a href="http://geology.utah.gov/sep/wind/maps.htm">http://geology.utah.gov/sep/wind/maps.htm</a>.

**Favorable Topography:** Do factors such as elevation, vegetation, and/or nearby land forms/topography suggest a quality wind resource? Factors that would suggest a quality wind site often include being higher than the surrounding area, being clear of obstructions that would create wind flow turbulence (large trees, buildings, geological features, etc.), tree/vegetation flagging (trees are permanently bent in direction of prevailing wind, with branches longer on the downwind side and shorter or missing on the upwind side), and proximity to mountains, valleys, or canyons that may accelerate wind flow. High elevation, whether on a ridge top or a plateau, can also suggest higher wind speeds.

**Accessibility:** Is there enough clear area at the proposed site to erect a tower and is it easily accessible? A clear, flat space of roughly 100ft x 100ft is required to erect a 20-meter anemometer.

**Favorable Land Use:** Is the site appropriate for a wind energy project? Are there (or will there be) building restrictions, zoning problems, or opposition from surrounding neighbors?

**Project Purpose/Goal:** Is the potential project expected to be large scale (commercial), medium scale (school, town, state, non-profit, Indian land), or small scale (private ownership, residential, business, ranch)? How clear are the objectives of the proposed plan? Who will use the power?

**Transmission and Load:** For large-scale projects, is the site near an electrical transmission line or a load center? For small-scale projects, is there an ability to use power generated on-site or locally?

**Proximity to Past Anemometer Sites:** Preference is given to sites near locations where data indicate there are quality wind resources and in promising areas where little or no data have been collected. Current and past anemometer sites can be viewed at: <a href="http://geology.utah.gov/sep/wind/anemometerdata/index.htm">http://geology.utah.gov/sep/wind/anemometerdata/index.htm</a>

Contact Information: (the person our office	ce will be worki	ing with for the loan)
Last Name		First Name
Mailing Address		
City	State	Zip Code
Home Phone (include area code)		_
Work Phone		Cell Phone
E-mail		Fax
Landowner Information:		
Go on to the next section if the Landowner at the same, please fill out this section.	and the Contact	person are the same. If they are not
Last Name		First Name
Mailing Address		
City	State	
Home Phone (include area code)		_
Work Phone		Cell Phone
E-mail		Fax
Application History:		
Have you applied with us before?		_
How many times have you applied?		-
What was the last year you applied?		-
Have you had an anemometer on loan before	e?	_
How many times have you had a loan?		-
When was the last year you received a loan?		-
<b>Project Description:</b>		
Purpose and goal of project for this location	(see instruction	<i>us</i> ):

If data reveal favorable wind resources, what kind of wind project do you foresee pursuing:
(circle one) Small (residential), Medium (community), Large (commercial), or Other
Location Specifics:
Physical Address
City/Town
County/Zip Code
Please provide <b>detailed</b> GPS Coordinates: (i.e. degree, minutes, and seconds):
Latitude:Longitude:
Topographic Map: (Please mark the proposed site on a topographic 7.5' quadrangle map and
include with application. You can purchase maps from the Department of Natural Resources
Map and Bookstore ( <u>mapstore.utah.gov</u> ) or access them online at
geology.utah.gov/maps/topomap/index.htm. www.topozone.com is another website where maps
can be accessed for free - downloading maps using topozone.com requires payment, however,
you can print images for free. If you would like help with this please contact our office.)
Elevation (in feet): Is the land where the anemometer will be placed
higher than the surrounding area?
Cleared Area: (Roughly 100ft x 100ft is required to erect a 20-meter anemometer)
approximate square feet or acres
Accessibility: How far is the site from the nearest paved road? Unpaved road?
Can the site be easily accessed with a vehicle?

Soil type at site: (circle one) Ledge, Rocky, Clay, Sandy, Topsoil

Restrictions: Are there any local restrictions on structure height, zoning, building, or other
requirements? If so what are they:
Neighbor: How far is the nearest neighbor from the site?
approximate feet or miles
Nearest Structure: How far is the nearest structure?
approximate feet or miles
Please describe the site: (i.e. vegetation, topography, obstacles, etc. Photographs of the site are
also helpful.)
Please explain why you feel that this would be a good site for an anemometer?
Property Line: How far is the nearest property line from the site?
approximate feetor miles
Airports: Name of the nearest airport
Approximate distance to the airport
Transmission/Distribution Lines:
How far are you from electrical transmission or distribution lines?
approximate feet or miles

What is the voltage of these transmission/distribution lines (if known)?
Who owns these lines?
Please describe these lines:
Have you discussed the possibility of placing a wind turbine at your site with your local utility?  If so, what was said?
Utility Contact Name:
Did the utility agree to provide transmission? (circle one) Yes or No
Anemometer Monitoring:
Monitor: Who will be responsible for monitoring the anemometer equipment?
Data Plugs: Who will be responsible for changing the data plugs?
If you have any questions about this application please contact:
Utah Geological Survey State Energy Program
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Salt Lake City, UT 84114-6480 (U.S. Postal Address) Our physical zip code for UPS and FedEX is 84116
(801) 538-5413